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VERSIONS WITH MARKINGS TO SHOW
CHANGES MADE TO CLAIMS

1. (Amended) A vibration member comprising:

[a driving portion;]

an elastic member including [said] a driving portion; and

an electro-mechanical energy conversion element [as a driving source] in contact with said elastic member, said electro-mechanical energy conversion element having a plurality of electrodes formed by a polarization process of said electro-mechanical energy conversion element, and a modulus of elasticity profile generated by the polarization process, where application of [being provided with] an alternating signal to said electro-mechanical energy conversion element generates [generate] a plurality of vibrations in said elastic member, and where a combination of the plurality of vibrations generates [so as to generate] a driving vibration in said driving portion [by combining said plurality of vibrations],

wherein a rigidity of a portion of said elastic member located between said plurality of electrodes is set larger than a rigidity of other portions of said elastic member so as to offset differences in the modulus of elasticity profile generated by the polarization process of said electro-mechanical energy conversion element [an ununiformity of rigidity of said vibration member caused by a polarization treatment performed on said

electromechanical energy conversion element is offset by partially changing the rigidity of said vibration member].

2. (Amended) A vibration member comprising:

[a driving portion;]

an elastic member including [said] a driving portion; and

an electro-mechanical energy conversion element [as a driving source] in contact with said elastic member, said electro-mechanical energy conversion element having a plurality of electrodes formed by a polarization process of said electro-mechanical energy conversion element, and a modulus of elasticity profile generated by the polarization process, where application of [being provided with] an alternating signal to said electro-mechanical energy conversion element generates [generate] a plurality of vibrations in said elastic member, and where a combination of the plurality of vibrations generates [so as to generate] a driving vibration in said driving portion [by combining said plurality of vibrations],

wherein a cross-sectional area of a portion of said elastic member located between said plurality electrodes is set larger that a cross-sectional area of other portions of said elastic member so as to offset differences in the modulus of elasticity profile generated by the polarization process of said electro-mechanical energy conversion element [an ununiformity of a positional phase difference in said plurality of vibrations caused by an

ununiformity of rigidity of said vibration member is offset by partially changing the rigidity of said vibration member].

3. (Amended) A vibration member comprising:

[a driving portion;]

an elastic member including [said] a driving portion; and

an electro-mechanical energy conversion element [as a driving source] in contact with said elastic member, said electro-mechanical energy conversion element having a plurality of electrodes formed by a polarization process of said electro-mechanical energy conversion element, and a modulus of elasticity profile generated by the polarization process, where application of [being provided with] an alternating signal to said electro-mechanical energy conversion element generates [generate] a plurality of vibrations in said elastic member, and where a combination of the plurality of vibrations generates [so as to generate] a driving vibration in said driving portion [by combining said plurality of vibrations],

wherein a density of a portion of said elastic member located between said plurality of electrodes is set higher than a density of other portion of said elastic member so as to offset differences in the modulus of elasticity profile generated by the polarization process of said electro-mechanical energy conversion element [an ununiformity of a wavelength in each of said plurality of vibrations caused by an ununiformity of rigidity of

said vibration member is offset by partially changing the rigidity of said vibration member].

13. (Amended) A vibration member having an annular or disc shape, comprising:

[a driving portion;]

an elastic member including [said] a driving portion, and having [the] an annular or disc shape; and

an electro-mechanical energy conversion element [as a driving source] having [the] an annular shape and bonded to one surface of said elastic member, said electro-mechanical energy conversion element having a plurality of electrodes formed by a polarization process of said electro-mechanical energy conversion element, and a modulus of elasticity profile generated by the polarization process, where application of [being provided with] an alternating signal to the electro-mechanical energy conversion element generates [generate] a plurality of vibrations in said elastic member, and where a combination of the plurality of vibrations generates [so as to generate] a driving vibration in said driving portion [by combining said plurality of vibrations],

wherein a rigidity of a portion of said elastic member located between said plurality of electrodes is set larger than a rigidity of other portion of said elastic member so as to offset differences in the modulus of elasticity generated by the polarization process of

said electro-mechanical energy conversion element [the rigidity of said elastic member is partially changed in accordance with an ununiformity of rigidity of said electro-mechanical energy conversion element, so that the rigidity of a peripheral direction in said annular or disc shape of said vibration member is set to be uniform].

14. (Amended) A vibration member having an annular or disc shape, comprising:

[a driving portion;]

an elastic member including [said] a driving portion, and having [the] an annular or disc shape; and

an [a plurality of] electro-mechanical energy conversion element having an annular shape and [elements as a driving source] bonded to one surface of said elastic member [along a peripheral direction], said [plurality of] electro-mechanical energy conversion [elements] element having a plurality of electrodes formed by a polarization process of said electro-mechanical energy conversion element, and a modulus of elasticity profile generated by the polarization process, where application of [being provided with] an alternating signal to said electro-mechanical energy conversion element generates [generate] a plurality of vibrations in said elastic member, and where a combination of the plurality of vibrations generates [so as to generate] a driving vibration in said driving portion [by combining said plurality of vibrations],

wherein a cross-sectional area of a portion of said elastic member located between said plurality of electrodes is set larger than a cross-sectional area of other portions of said elastic member so as to offset differences in the modulus of elasticity profile generated by the polarization process of said electro-mechanical energy conversion element [rigidity of said elastic member is partially changed in accordance with spaces among said plurality of electro-mechanical energy conversion elements, so that the rigidity of the peripheral direction in said annular or disc shape of said vibration member is set to be uniform].

15. (Amended) A vibration member having an annular or disc shape, comprising:

[a driving portion;]

an elastic member including [said] a driving portion, and having [the] an annular or disc shape; and

an electro-mechanical energy conversion element [as a driving source] having [the] an annular shape and bonded to one surface of said elastic member, said electro-mechanical energy conversion element having a plurality of electrodes formed by a polarization process of said electro-mechanical energy conversion element, and a modulus of elasticity profile generated by the polarization process, where application of [being provided with] an alternating signal to the electro-mechanical energy conversion element

generates [generate] a plurality of vibrations in said elastic member, and where a combination of the plurality of vibrations generates [so as to generate] a driving vibration in said driving portion [by combining said plurality of vibrations],

wherein a density of a portion of said elastic member located between the plurality of electrodes is set higher than a density of other portions of said elastic member so as to offset differences in the modulus of elasticity profile generated by the polarization process of said electro-mechanical energy conversion element [by providing said elastic member with a rigidity ununiformity portion corresponding to a portion whose rigidity is non-uniform in said electro-mechanical energy conversion element, the rigidity of said vibration member is set to be uniform].

17. (Amended) A vibration member comprising:

[a driving portion;]

an [a bar-shaped] elastic member including [said] plural elastic member portions and a driving portion; and

an electro-mechanical energy conversion element [as a driving source] held and fixed between said plural elastic member portions [members], said electro-mechanical energy conversion element having a plurality of electrodes formed by a polarization process of said electro-mechanical energy conversion element, and a modulus of elasticity profile generated by the polarization process, where application of [being provided with] an

alternating signal to said electro-mechanical energy conversion element generates [generate] a plurality of vibrations in said elastic member, and where a combination of the plurality of vibrations generates [so as to generate] a driving vibration in said driving portion [by combining said plurality of vibrations],

wherein a rigidity of a portion of said elastic member located between the plurality of electrodes polarized in directions different from each other is set larger than a rigidity of other portion of said elastic member so as to offset differences in the modulus of elasticity profile generated by the polarization process of said electro-mechanical energy conversion element [by providing said elastic member with a rigidity ununiformity portion corresponding to a portion whose rigidity is nonuniform in said electro-mechanical energy conversion element, the rigidity of said vibration member is set to ho uniform].

18. (Amended) A vibration member comprising:

[a driving portion;]

an [a bar-shaped] elastic member including [said] plural elastic member portions and a driving portion; and

an electro-mechanical energy conversion element [as a driving source] held and fixed between said plural elastic member portions [members], said electro-mechanical energy conversion element having a plurality of electrodes formed by a polarization process of said electro-mechanical energy conversion element, and a modulus of elasticity

profile generated by the polarization process, where application of [being provided with] an alternating signal to said electro-mechanical energy conversion element generates [generate] a plurality of vibrations in said elastic member, and where a combination of the plurality of vibrations generates [so as to generate] a driving-vibration in said driving portion [by combining said plurality of vibrations],

wherein a portion of said elastic member located between said plurality of electrodes polarized in directions different from each other is cut out so as to offset differences in the modulus of elasticity generated by the polarization process of said electro-mechanical energy conversion element [in said electromechanical energy conversion element, a sectional area of a portion in which an area different in rigidity from another portion is present is set to be different from the sectional area of the another portion, so that the rigidity of the portion becomes equal to the rigidity of the another portion].

57. (Amended) A vibration wave driving apparatus including said vibration member according to claim 1 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member and movable relative to said vibration member by the driving force of said driving portion.

58. (Amended) A vibration wave driving apparatus including said vibration member according to claim 2 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member and moveable relative to said vibration member by a driving force of said driving portion.

59. (Amended) A vibration wave driving apparatus including said vibration member according to claim 3 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member and moveable relative to said vibration member by a driving force of said driving portion.

60. (Amended) A vibration wave driving apparatus including said vibration member according to claim [4] 15 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member and moveable relative to said vibration member by a driving force of said driving portion.

61. (Amended) A vibration wave driving apparatus including said vibration member according to claim 13 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member and moveable relative to said vibration member by a driving force of said driving portion.

62. (Amended) A vibration wave driving apparatus including said vibration member according to claim 14 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member and moveable relative to said vibration member by a driving force of said driving portion.

63. (Amended) A vibration wave driving apparatus including said vibration member according to Claim 1 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member through a fluid, said contact member being moveable relative to said vibration member by a driving force of said driving portion.

64. (Amended) A vibration wave driving apparatus including said vibration member according to Claim 13 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member through a fluid, said contact member being moveable relative to said vibration member by a driving force of said driving portion.

65. (Amended) A vibration wave driving apparatus including said vibration member according to Claim 14 and [relatively moving said vibration member and] a contact member in press [pressurized to] contact with said vibration member

through a fluid, said contact member being moveable relative to said vibration member by a driving force of said driving portion.

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